

CLAIMS

What is claimed is:

- 1 1. A method, comprising:
2 receiving a request for an information object at an address identified by a uniform resource
3 locator (URL); and
4 mapping the URL to a corresponding anycast address for the information object.
- 1 2. The method of claim 1 further comprising using resolving the anycast address for the
2 information object to a unicast address for the information object.
- 1 3. The method of claim 2 further comprising sending the information object to the client.
- 1 4. The method of claim 3 wherein the request is received at an information object repository that is
2 topologically closer to the client than any other information object repository.
- 1 5. The method of claim 4 wherein the information object repository is selected according to
2 specified performance metrics.
- 1 6. The method of claim 5 wherein the performance metrics comprise one or more of: average
2 delay from the selected information object repository to a source of the request, average processing
3 delay at the selected information object repository, reliability of a path from the selected
4 information object repository, available bandwidth in said path, and loads on the selected
5 information object repository.
- 1 7. An information object repository configured to map a uniform resource locator (URL) for an
2 information object to a network layer anycast address.

3 8. The information object repository of claim 7 being further configured to advertise anycast
4 address using a network layer anycast routing protocol.

1 9. A network, comprising:

2 at least one client configured to request an information object using a uniform resource
3 locator (URL); and
4 an information object repository configured to receive the request for the information
5 object and to map the URL into a network layer anycast address.

1 10. The network of claim 9 wherein the information object repository is further configured to
2 resolve the network layer anycast address into a unicast address.

1 11. The network of claim 10 wherein the information object repository is topologically closer to
2 the requesting client than any other of a number of information object repositories in the network.

3 12. The network of claim 11 further comprising a Web router configured to select the information
4 object repository that is closer to the requesting client than any other of the number of information
5 object repositories in the network without regard as to whether the information object is actually
6 stored at the selected information object repository.

1 13. The network of claim 12 wherein the Web router is further configured to select the selected
2 information object repository according to specified performance metrics.

1 14. The network of claim 13 wherein the performance metrics comprise one or more of: average
2 delay from the selected information object repository to a source of the request, average processing
3 delay at the selected information object repository, reliability of a path from the selected
4 information object repository, available bandwidth in said path, and loads on the selected
5 information object repository.